FAIMS Review Group Recommendations

EXECUTIVE SUMMARY

A joint State and Federal Review Team reviewed the needs, design and current system requirements of FAIMS and to develop recommendations regarding future development and implementation requirements, including cost efficiencies as they relate to the administration of the Federal Aid program.

The Teams major recommendations were:*

1. End the Oracle contract as soon as possible but no later than the end of the year.
   Contract Ended on September 30th, 2000.

2. Complete and implement the Service's Financial System and FAIMS interface as soon as possible.
   FAIMS/FFS Interface was implemented in July 2000.

3. Complete the work to prepare six different types of reports and delay or cancel other development of other requested reports.
   Completed and Grant Information User Acceptance Team asked in June 2001 to review remaining reporting requirements for future guidance.

4. Complete development of selected Lands module capabilities.
   Revised Land Module releases in March and June completed this.

5. Stop all Phase II and Phase III development activities.
   Phase II, electronic grant interface and Phase III, GIS capability were put on hold in FY2000.

6. Additional staff needs to be hired at the FAIMS office.
   FAIMS Staffing needs increased from 6.5 to 8 FTE's as recommended, currently two vacancies in process of filling.

* Summary of current status of each recommendation appears in italicized text.

CHARGE

The Charge to the FAIMS Review Group as contained in the Director's March 8, 2000 memorandum was "to review the needs, design and current system requirements of FAIMS and to develop recommendations regarding future development and implementation requirements, including cost efficiencies as they relate to the administration of the Federal Aid program. These recommendations should take into consideration the needs of both the Fish and Wildlife service and the State fish and wildlife agencies and be made within the framework of anticipated administrative budget levels."

MEMBERS

The Members of the FAIMS Review Group are:

Allen Clark - FWS, Division of Budget, Washington, D.C.
Pam Matthes - FWS, Division of Finance, Washington, D.C.
Edna Romero - FWS, Division of Finance, Denver, CO
Owen Ambur - FWS, Division of Information Resource Management, Arlington, VA
Brad Johnson - FWS, Assistant Regional Director - Federal Assistance, Minneapolis, MN
Vaughn Douglas - FWS, Federal Aid, Amherst, MA
Lorraine Manzanares - Federal Aid, Albuquerque, NM
Ron Regan - Director, Vermont Department of Fish and Wildlife
Allen Farris - Administrator, Iowa Fish and Wildlife Division
Roberta Salazar Henry - Assistant Director, New Mexico Department of Fish and Game
Fred Snyder - Federal Aid Coordinator, New Jersey Division of Fish, Game and Wildlife

REVIEW GROUP ACTIVITIES AND FINDINGS

The FAIMS Review Group had it's first conference call on March 16th with the focus being clarification of the charge and a discussion of how and when the group would accomplish it's tasks.

The Co-Chairs then met on March 27th at the North American Wildlife and Natural Resources Conference in Chicago to work on preliminary scoping of the charge and to develop a draft agenda for a meeting on April 25th.

On April 18th, the review group had a conference call to review and finalize the draft agenda and expected outcome for the meeting on April 25th.

On April 25th the review Group met in Lakewood, CO at the FAIMS Office. The FAIMS Team gave a presentation of the FAIMS System focusing on 1) a diagram of how FAIMS is distributed nation-wide, 2) the major components of the system and how they operate, 3) how the system is maintained

through the existing structure of the FAIMS Team and Oracle support contract, 4) how the system requirements were developed and relate to current and future development, and 5) what it will take to continue operations and what options exist for addressing future development needs.

FINDINGS

Discussion of Phase I requirements revealed the following:

> **From the Demo the FAIMS Team provided, it appears that the system is working well and provides a considerable amount of information on grants.** It was determined that not all of the Phase I system requirements have been met for various reasons, with most of them being in some stage of development. Of the items addressed three seem to be of particular importance, the Lands Module, Reports and List of Value's.
>
> The Lands Module was the last component developed and the one where the User Acceptance Team is still working to finalize or clarify some requirements. It has been the most difficult one for staff to come to resolution on. However, there seems to be a consensus that the requirement for scanning large land-related documents such as legal descriptions and Platt maps needs to be completed. In addition, during the demo provided by the FAIMS Team a question about the need for and use of habitat type was raised. The Review Grouip believes this needs to be looked at again by the various User acceptance Teams.
>
> The reports contained in FAIMS, reports not yet completed and ad hoc query reporting capability were discussed. Many of the reports identified as requirements have been completed and are now available in FAIMS. There were 6 or so reports that are nearly completed and would provide useful information to the Federal Aid staff. The remaining reports identified as requirements, where no work has progressed, either need further clarification by the User Acceptance Teams, are duplicates of existing reports completed or are of low priority and should probably be put on hold for the remainder of this year. Although the Discoverer Query capability was briefly demonstrated, it appears that it could and would fill the gap for any additional reporting needs from FAIMS for the foreseeable future and staff should be trained on how to use it.
>
> During the Demo of FAIMS it became apparent that the concept of List of Values (LOV's) serves an important role in controlling selection of information, ensuring data uniformity and in defining how and what information is displayed and reported. A question and perhaps concern was raised regarding use of LOV's, particularly with Checklist Events, which have been predefined and record the status of grant packages through the management cycle. Discussions

3

identified a need for Federal Aid Managers to provide more attention to how these LOV's are used, particularly with Checklist Events to ensure uniformity across the program.

Remaining Phase I items did not appear to be many or of significantly high priority to warrant separate identification. During discussions it was felt that the FAIMS Team is in a better position to make decisions on which ones to address and when, given other tasks they are involved in.

Discussions of Phase II led the Review Group to clarifying three different tasks and purposes that appear to be included in this Phase. These are 1) State access for Electronic Submission of Grants, 2) State access to existing FAIMS data via WEB access, and 3) Public access to existing FAIMS data via WEB access. Each of these have a different purpose and need to be addressed separately.

Our discussions regarding State access to FAIMS for electronically submitting grants (commonly referred to as Electronic Grant Interface) generated considerable discussion as to who within the government has the lead for this component. There also appeared to be considerable confusion as to what is meant by Electronic Grant Interface and what computer systems are necessary externally and internally within an agency. What did become clear in our discussions is that there is a Departmental effort underway to pilot a system that NASA has developed (Electronic Handbook System, EHB's) and that the FAIMS Team should participate in this pilot before doing any more work on an Electronic Grant Interface. The FAIMS Team has indicated that they already agreed to participate in the pilot and were working with other's in the Service and Department towards this end.

Discussion concerning State access to existing FAIMS information utilizing Web browsers clarified that this is not the same as Electronic Grant Interface as discussed above. There appears to be a need to make FAIMS information accessible to other's outside of the Federal Aid program. The FAIMS Team has now setup 6 non-Federal Aid user's within the Service to have access to FAIMS information. This was done by installing client software on the user's machine's and mapping them to FAIMS server's. The cost of the clients on each of these machine's is about $2,000 and consumes a license for each one installed. If FAIMS uses this approach widely the software and licensing costs are going to increase significantly. In addition there is an additional software support costs the FAIMS Team has to assume to ensure these users have current, up-to-date software. It is cost prohibited to utilize this approach for States. There are other alternatives that utilize existing Internet Technology which would minimize or eliminate installing software on user machines. These also have a development cost depending on what information and options are used to make the information available but they would be less expensive and more widely accessible.

Discussion of Public access to existing FAIMS information generated discussion about why, who and what information would be made available. These need further clarification. The FAIMS Team indicated that FAIMS information could be made available on the Internet that would satisfy a number of requests Federal Aid currently gets about program information. Some of the reports currently in FAIMS are examples of what could be made available. Some members of the Review Group were a little concerned about what information and how it would be presented or made available. If FAIMS information is made available on the Internet, then anyone with a web browser could access it.

Discussion of Phase III, the GIS component was very brief. The FAIMS Team indicated that the current system requirements called for making selected FAIMS information, such land acquisition and boating access sites, available in maps and overlays of geographic information. To date very little work has been done on this component, other than building in some data fields that would be necessary to link the information to GIS applications. The FAIMS Review Group decided not to address this component as any real work on it has been put on hold indefinitely and is not likely to be addresses in the foreseeable future.

RECOMMENDATIONS

S   <u>Annual Operations</u>

FAIMS annual operations should be adequately funded and staffed to keep the system functioning properly and meeting the internal needs of the Federal Aid program.

- Recommend increasing the current staff level of the FAIMS Team from the current level of **6.5 FTE's to 8.5 FTE's**. It is recommended that the FAIMS Team immediately hire a Database Administrator and an Administrative Technician position. The Database Administrator needs to be hired while the Oracle Database Administrator is still under contract so knowledge about the FAIMS database and replication can be transferred to the new employee. This is a critical position for the continued operations support of FAIMS. The Administrative Technician position would reduce the costs of contracting for this support and is necessary to maximize the time devoted by FAIMS technical specialists to FAIMS operations.

-Recommend providing an operational funding level of approximately $1,200,000, which provides funding for the 8.5 FTE's, the FAIMS software and hardware licensing and maintenance costs, office supplies and services, travel and training costs.

S   <u>Phase I</u>

- **The review of FAIMS has shown that the system is functional and working very well**

in meeting the needs of the Federal Aid program. Most of the Phase I requirements have been completed, but a few remain. It is recommended that the FAIMS Team work to complete the remaining Phase I items given the time they have between now and September 30. In particular, work should be completed on the following:

1. Lands Module: Providing the scanning capabilities needed in FAIMS for scanning legal descriptions, plate maps, etc., associated with individual land acquisitions.
   a) Review rationale for collecting and using habitat type information with the User Acceptance Teams and states.

2. Reports: The FAIMS Team should complete approximately a half dozen nearly finished reports that are important and would be extremely useful to the Federal Aid staff. This would complete the majority of reports identified in the system requirements. The remaining, uncompleted reports either need further clarification and definition from the User Acceptance Teams or are deemed to be either no longer needed or of a lower priority.

3. List of Values (LOV's): Federal Aid Managers need to review the usage of the List of Values associated with Checklist Events to improve consistency in use and terminology across the Federal Aid program. The FAIMS Team can then be provided with an updated list reflecting management decisions for incorporation into FAIMS.

4. Other Phase I items. The FAIMS Team should pursue completion of remaining Phase I items given available resources and time between now and September 30th. The Team should exercise it's judgement on which items to address.

S   Phase II
For clarification, Phase II has been segregated into 3 components that have different purposes and associated actions.

- State Access for Grant Submission: This is commonly described as an Electronic Grant Interface. It is recommended that the FAIMS Team put on hold all contractor development actions while the FAIMS Team participates in the Departmental Electronic Handbook System Pilot. The States are concerned about new submission requirements by electronic media, including time and expenses.

- State access to FAIMS information via WEB. There is conceptual support for this kind of access if it can be provided at an acceptable cost/benefit level. It is recommended that the FAIMS Team develop a number of options with associated costs for making FAIMS

information available to the States. These options should be provided to the FAIMS Review Group by August, 2000.

- Public Access VIA WEB: Further discussion needs to take place to define what information would be most useful to the public. It is recommended that Federal Aid Management create a User Acceptance Team made up of FWS and State representatives to determine what, if any, FAIMS information should be made available to the public and work with the FAIMs Team on options for accomplishing it.

S   Phase III - GIS
- The committee Chairs chose not to address at this time as no work was currently being done nor planned for this Phase in the foreseeable future.

S   Recommended Future Management Actions
- It is recommended that Federal Aid Management conduct a FAIMS Status Review in September. This review would focus on the following:
  - FAIMS/FFS Interface
  - FAIMS Staffing schedule
  - FAIMS Phase I completion
  - Departmental Electronic Handbook System Pilot update
  - State access to FAIMS information via WEB.

APPENDIX - BACKGROUND

The FAIMS system consists of a production server in each Regional Office and the Washington Federal Aid office, 2 Master sites, one in Washington Federal Aid office and one in Lakewood, CO, and a number of additional servers in Lakewood, CO to support training, testing, development and operational needs associated with FAIMS. Each of these servers contain backup tapes that are updated daily and each production server copies data to the master sites so there are at least two additional copies of data from all servers.

The FAIMS system was designed as a grants management system, capable of collecting all relevant information needed for managing grants (both fiscally and programmatically), processing this information (including interfaces with Health and Human Services' Payment Management System) and providing numerous reporting capabilities (both predefined reports and general ad hoc query capability). FAIMS contains specific information on all grants submitted to the Federal Aid offices. This includes unique grant identifiers, information on agencies and personnel associated with managing the grants, objectives, benefits and costs for each grant (including detailed chronological obligation and payment data) and information on what was accomplished by the grants. The system also provides the capability to document and track the status of grant review, approval, implementation and completion, including compliance requirements. FAIMs also contains an audit feature to identify who and when data was created, edited and/or deleted.

The FAIMS system is currently maintained by a distributed Federal Aid Team (2 staff in Atlanta, GA., 1 staff in Minneapolis, MN., 2 staff in Lakewood, CO., and one staff in Arlington, VA plus the Project Manager. In addition to the above, this team relies heavily on the skills of 3 Oracle contractors (1 Database Administrator and 2 Designer Developers). This team provides operations support to the existing system, keeps the application software current on all servers, maintains a help desk to address problems, provides training to end-users and continues development of the FAIMS/FFS interface. In addition each Regional Office utilizes their Computer Staff person to provide assistance in maintaining the production server on-site (e.g., changing back-up tapes, checking system events and operations that can't be done remotely).

The system requirements for FAIMS were developed over a two year period through a number of User Acceptance Teams (Fiscal, Grant Information, Log and Contact Information, Lands, and ADP) and a Steering Committee of Federal Aid Managers. Each of the User Acceptance Teams included a state representative from the IAFWA Grants-in-Aid Working Subcommittee, with the exception of the ADP User Acceptance Team. These teams met numerous times to define what the FAIMS system needed to provide for managing grants. The resulting system requirements were presented to the Federal Aid Managers for approval and formed the basis for system development.   A FAIMS Prototype and a Beta version of FAIMS were developed and demonstrated to Federal Aid staff in all

Regions and to the User Acceptance Teams as development occurred to ensure the system was meeting the defined system requirements. Because the system requirements were so comprehensive, the FAIMS Team with concurrence of the Steering committee, identified a three phase approach to development of FAIMS. Phase I was the Federal interface which consisted of the basic FAIMS infrastructure to enter, process and manage the Grant-related information. Phase II was the State interface to support Electronic Submission of grants and Web access to FAIMS data. Phase III was the GIS Component that would relate selected information into a GIS view.

Phase I was completed and became operational at the end of January, 1999. At that time operations support tasks, help desk support and training efforts began and was provided by the FAIMS Team. Work also began on Phase II, the State Interface, until a hold was placed on further development at the beginning of FY2000, with the exception of the FAIMS/FFS Interface which was directed to be completed.

Currently the existing FAIMS Team is spending all of it's time juggling the needs and demands of operations support, help desk support, user training and development of the FAIMS/FFS Interface in addition to many other requests and tasks that are placed on them. Discussion of staffing and funding needed to keep the existing Federal Interface operational and continue further development revealed the following.

> The FAIMS effort has experienced a budget cut from an initial $3.6 million to a current 2.2 million for FY2000. This has resulted in the reduction of 4 consultants from the Oracle Support Contract and the elimination of all development work by the FAIMS Team except the FAIMS/FFS Interface. The reduction of the Oracle contractors has required the FAIMS Team members to pick up more tasks associated with Operations support. This additional workload has prevented the Team from being able to schedule adequate time to learn some of the critical Oracle skills they need to assume full operations and development support for FAIMS and move away from the expensive Oracle contract. The most critical skill needed by the Team is that of a Database Administrator. In addition, available time of the two staff in Lakewood often gets diverted to administrative and clerical functions because of a lack of a similar position in Lakewood.

> An additional observation is that the distributed nature of the FAIMS Team is incurring travel costs that could be saved by completing the centralization of the Team to Lakewood. In addition, centralization of the team would bring some relief to the workload being experienced by the 2 staff in Lakewood and increase transfer of knowledge and skills among the Team and from the Oracle contractors.

> Discussion of funding with the FAIMS Team revealed that there is a bottom threshold below

which it is not possible to maintain FAIMS from either a funding or staffing perspective. From a funding perspective, dropping below $1.1 million would prevent the FAIMS Team from being able to guarantee that the system could be maintained and data integrity intact. Most tasks associated with operations support would have to be curtailed or dropped entirely as the first priority would be to maintain the existing system. From a staffing perspective, dropping below the current 6.5 staff years would reduce the labor and skills necessary to keep the system running. The Team feels it is already at maximum work capacity and the loss of the Oracle Contract without additional staff will put them in a serious workload burden. The latest projected Federal Aid budget contains $1.4 million to $1.9 million for FAIMS given different Federal Aid budget scenarios being discussed with Congress.